

Collaboration on Science in Support of Fire Management in California



Sydney Smith, Max Creasy, Marchel Muenneke, and Hugh Safford collaborate on a quantitative reference model for ponderosa pine.

California's Potential Natural Vegetation Types Modeled for the Rapid Assessment

Alpine Meadows Barrens Aspen With Conifer California Grassland California Mixed Evergreen - North Chaparral Coastal Sage Scrub

Coastal Scrub/Coastal Prairie

Coast Redwood

Herbaceous Wetland Interior White Fir. NE CA

Jeffrey Pine

Mixed Conifer- north slopes

Mixed Conifer- south slopes

Montane Chaparral

Oak Woodlands

Ponderosa Pine

Red Fir / White Fir

Red Fir / Western White Pine

Saltbush

Sierra Nevada Lodgepole (Cold/Wet)

Sierra Nevada Lodgepole (Dry)

S Coast Mixed Evrgrn/Big Cone Douglas-fir

Wet Mountain Meadow/Lodgepole Pine

Look for more online at: http://www.landfire.gov

Over twenty ecologists and fire managers from the USFS, BLM, NPS, NRCS, CDF, and TNC met in Sacramento, CA, November 1-5, 2004 to work in collaboration and document their knowledge about ecosystem structure, succession, and disturbance dynamics for major potential natural vegetation types across the state. Over the 5-day workshop, participants learned how to model ecosystem structure and function, and then completed 23 quantitative ecological models (see sidebar, below).

Model outputs - reference conditions by potential natural vegetation type - will be used in the LANDFIRE Rapid Assessment of Fire Regime Condition Class (FRCC) (to be completed in summer 2005), and further refined to more accurately map FRCC across the state by 2007 via the national LANDFIRE project.

The quantified ecological models developed from this workshop are also available for use in land and resource management, fire management and conservation area plans. While reference models include estimates of expected ecosystem function under native disturbance regimes, these same models can be used to develop alternative scenarios representing current or alternative future conditions. For example, federal, state, county and Conservancy partners in the Lassen Foothills project of northern California are considering refining these models to guide development of landscape-level desired future conditions and alternative restoration strategies for a proposed community-based fire management plan.

Collaboration on the science of fire and ecosystem function is proving beneficial to achievement of common goals for fire regime restoration in California, and elsewhere across the U.S.



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